

Package ‘gptr’

April 5, 2025

Type Package

Title A Convenient R Interface with the OpenAI 'ChatGPT' API

Version 0.7.0

Description

A convenient interface with the OpenAI 'ChatGPT' API <<https://openai.com/api>>. 'gptr' allows you to interact with 'ChatGPT', a powerful language model, for various natural language processing tasks. The 'gptr' R package makes talking to 'ChatGPT' in R super easy. It helps researchers and data folks by simplifying the complicated stuff, like asking questions and getting answers. With 'gptr', you can use 'ChatGPT' in R without any hassle, making it simpler for everyone to do cool things with language!

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Encoding UTF-8

RoxygenNote 7.3.1

Imports jsonlite, RCurl

NeedsCompilation no

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Repository CRAN

Date/Publication 2025-04-05 11:20:14 UTC

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dataframe_to_text	<i>Convert data.frames to text interpretable by ChatGPT</i>
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Description

This function takes a dataframe as input and converts it to a text representation.

Usage

```
dataframe_to_text(dataframe)
```

Arguments

dataframe A dataframe to be converted.

Value

A character vector representing the dataframe in text format.

Examples

```
dataframe <- data.frame(  
  Name = c("John", "Alice", "Bob"),  
  Age = c(25, 30, 22),  
  Score = c(95, 88, 75)  
)  
dataframe_to_text(dataframe)
```

get_response	<i>Get Response from OpenAI Chat API</i>
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Description

This function sends a user input to the OpenAI Chat API and retrieves a response.

Usage

```
get_response(  
  user_input = "what is a p-value in statistics?",  
  system_specification = "You are a helpful assistant.",  
  model = "gpt-3.5-turbo",  
  api_key = Sys.getenv("OPENAI_API_KEY"),  
  print_response = TRUE  
)
```

Arguments

user_input	The user's input for the chat interaction. Default is "what is a p-value in statistics?".
system_specification	The system's role and content for the chat interaction. Default is "You are a helpful assistant."
model	The OpenAI language model to use. Default is "gpt-3.5-turbo".
api_key	The API key for accessing the OpenAI API. Defaults to the value of the "OPENAI_API_KEY" environment variable.
print_response	Logical, indicating whether to print the response. Default is TRUE.

Value

A list containing the response from the OpenAI Chat API.

Examples

```
response1 = get_response(user_input = "How to calculate the bonforoni corrected p values?")
response2 = get_response(user_input = paste0("Based on this data.frame in R: \n\n",
                                             dataframe_to_text(mtcars),
                                             "\n\n which variables are correlated?"))
response3 = get_response(user_input = "What are redox reactions?",
                         system_specification = "You are a knowledgeable and helpful chemist \n
                                                who will answer any questions in German")
```

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